

In the Claims

The following is a complete listing of the claims and replace all prior claims in the application:

1 1. (Currently Amended) A method for minimizing the cycle time of a burnish test

2 cycle, comprising:

3 performing an initial burnish operation;

4 measuring ~~performing~~ an initial MR resistance ~~measurement~~ for a head;

5 determining whether the measured MR resistance indicates the head has

6 clearance; and

7 completing the test cycle when the head is determined to have clearance.

1 2. (Currently Amended) The method of claim 1 further comprising:

2 reducing the ~~initiating operation to reduce~~ fly-height of the head when the

3 measured MR resistance indicates the head does not have clearance;

4 perform a subsequent burnish operation ~~continue burnishing the surface;~~

5 measuring the ~~performing another~~ MR resistance ~~measurement~~ again; and

6 returning to determine whether the measured MR resistance indicates the head

7 has clearance.

1 3. (Currently Amended) The method of claim 2, wherein the ~~initiating~~

2 ~~operation to reduce~~ reducing the fly-height of the head further comprises selecting at

3 least one process from the group comprising reducing the pressure within the

4 disclosure, reducing the spindle speed and increasing the pre-load to the head.

1 4. (Original) The method of claim 1, wherein the determining whether
2 measured MR resistance indicates the head has clearance further comprises comparing
3 the absolute MR resistance measurements to a threshold to identify whether the head
4 has clearance.

1 5. (Original) The method of claim 1, wherein the determining whether
2 measured MR resistance indicates the head has clearance further comprises comparing
3 the MR resistance rate of change to a threshold to identify whether the head has
4 clearance.

1 6. (Currently Amended) A drive controller for minimizing the cycle time of
2 a burnish test cycle, the drive controller comprising:
3 memory for storing data therein; and
4 a processor, coupled to the memory, the processor being configured for
5 performing an initial burnish operation, measuring ~~performing~~ an initial MR resistance
6 ~~measurement~~ for a head, determining whether the measured MR resistance indicates the
7 head has clearance and completing the test cycle when the head is determined to have
8 clearance.

1 7. (Currently Amended) The method of claim 6, wherein the processor is
2 further configured for reducing the ~~initiating operation to reduce~~ fly-height of the head
3 when the measured MR resistance indicates the head does not have clearance, perform a
4 subsequent burnish operation ~~continue burnishing the surface, measuring the~~
5 ~~performing another~~ MR resistance ~~measurement~~ again and returning to determine
6 whether the measured MR resistance indicates the head has clearance.

1 8. (Currently Amended) The method of claim 7, wherein the processor
2 ~~initiates operation to reduce~~ reducing the fly-height of the head by selecting at least one
3 process from the group comprising reducing the pressure within the disclosure, reducing
4 the spindle speed and increasing the pre-load to the head.

1 9. (Original) The method of claim 6, wherein the processor determines
2 whether measured MR resistance indicates the head has clearance by comparing the
3 absolute MR resistance measurements to a threshold to identify whether the head has
4 clearance.

1 10. (Original) The method of claim 6, wherein the processor determines
2 whether measured MR resistance indicates the head has clearance by comparing the MR
3 resistance rate of change to a threshold to identify whether the head has clearance.

1 11. (Original) A program storage device readable by a computer, the
2 program storage device tangibly embodying one or more programs of instructions
3 executable by the computer to perform operations for minimizing the cycle time of a
4 burnish cycle, the operations comprising:
5 performing an initial MR resistance measurement for a head;
6 determine whether the measured MR resistance indicates the head has clearance;
7 and
8 completing the test cycle when the head is determined to have clearance.

1 12. (Currently Amended) The program storage device of claim 11 further
2 comprising:
3 performing an initial burnish operation;
4 measuring ~~performing~~ an initial MR resistance ~~measurement~~ for a head;
5 determining whether the measured MR resistance indicates the head has
6 clearance; and
7 completing the test cycle when the head is determined to have clearance.

1 13. (Currently Amended) The program storage device of claim 12, wherein
2 the ~~initiating operation to reduce~~ reducing the fly-height of the head further comprises
3 selecting at least one process from the group comprising reducing the pressure within
4 the disclosure, reducing the spindle speed and increasing the pre-load to the head.

- 1 14. (Original) The program storage device of claim 11, wherein the
- 2 determining whether measured MR resistance indicates the head has clearance further
- 3 comprises comparing the absolute MR resistance measurements to a threshold to
- 4 identify whether the head has clearance.

1 15. (Original) The program storage device of claim 11, wherein the
2 determining whether measured MR resistance indicates the head has clearance further
3 comprises comparing the MR resistance rate of change to a threshold to identify whether
4 the head has clearance.